

### **REMARKS**

The issues outstanding in the Office Action mailed November 4, 2008, are the requirement for restriction, the objections to the claims and the rejections under 35 U.S.C. 112, 102 and 103. Reconsideration of these issues, in view of the following discussion, is respectfully requested.

#### **Requirement for Restriction**

Applicant's traversal of the requirement for restriction is maintained. The Office Action argues that, under the PCT rules, unity of the invention exists between different groups of claims only if a "special technical feature" is patentable over the art and exists in all the groups. This misstates the applicable rule. 37 C.F.R. 1.475 states, in section (b), that a national stage application containing claims to different categories of invention *will be considered to have unity of invention* if the claims are drawn to a combination of categories such as (2) a product and a process of use of said product. In the present situation, the claims are drawn to an insulating process, using a specific composition, and to that composition, *per se*. Accordingly, unity of invention must be found to exist, and the restriction requirement should be withdrawn.

#### **Objections to Claims**

The claims have been revised in consideration of U.S. practice. Accordingly, it is submitted that the objections are moot, and withdrawal thereof is respectfully requested.

#### **Rejections Under 35 U.S.C. 112**

Claims 1-6, 8-10, 12-19 and 21-29 have been rejected under 35 U.S.C. 112, first paragraph. Reconsideration of this rejection is respectfully requested. It is argued, at page 3 of the Office Action, that the claims are non-enabled inasmuch as they do not describe how to use the claimed method for thermal insulation. Specifically, the Office Action questions whether the gel should be positioned directly onto an object to be insulated, or into an external jacket. This rejection is not understood, inasmuch as the specification clearly describes to one of ordinary

skill in the art how to apply the insulating material in accordance with the invention. For example, page 14 discloses application of the thermal insulation material to hydrocarbon flow lines as direct or injected coatings between the flow lines and an external protective jacket, or for the insulation of singularities, in which a jacket or sealed casing can be placed there around if a singularity is already in place in use. The insulation of flow lines etc. is a routine application in the art, and it is not seen that the presently claimed methods would, in any respect, be non-enabled. Withdrawal of the rejection is therefore respectfully requested.

It is noted that the two rejections in paragraphs 3 and 4 at page 3 of the Office Action appear to be the same rejection, and the above comments are submitted to be responsive to both rejections, both of which should be withdrawn.

Claims 1-6, 8-10, 12-19 and 21-29 have been rejected under 35 U.S.C. 112, second paragraph. Various clarifying amendments have been made to the claims, and it is submitted that the rejections at page 4 of the Office Action are thus moot. Withdrawal thereof is respectfully requested.

#### **Rejections Under 35 U.S.C. 102**

Claims 1, 3-6, 24-26, 28 and 29 have been rejected under 35 U.S.C. 102(b) over Joubert (EP '124). Reconsideration of this rejection is respectfully requested.

At the outset, it is believed that there is a significant error in the rejections, apparent at pages 5+ of the Office Action. Each time consideration is given to claim 3, reciting that the insulating liquid base is a phase change material, the claim is dismissed with the argument that the limitation is not addressed "because phase change material in claim 1 is optional." While this might be true for claim 1, it is clearly not true for claim 3. Claim 3 selects one and only one option put forth in claim 1, that the liquid base "is" a phase change material. Thus, this claim cannot be ignored, as it has been in the rejections. As a result, Applicants have not had a full examination of the claims of this application, and it is quite clear that a request for a complete office action would have had to be granted. As a result, it is submitted that any subsequent office action herein should absolutely not be made final, inasmuch as the limitation now recited in claim 1, that the liquid base is a phase change material, was never optional but required in claim

3, and claim 3 was not properly examined previously. It would be inequitable to make any next rejection final, inasmuch as this feature was improperly denied consideration previously.

Inasmuch as Joubert does not disclose the use of a phase change material, it does not anticipate the claims, and withdrawal of this rejection is appropriate. Moreover, independent claims 42 and 43, which recite that the insulating liquid is cyclic or noncyclic aliphatic hydrocarbons, aromatic hydrocarbons, aliphatic and aromatic mixtures, fatty acids, vegetable oils or animal oils or halogenated compounds, it is further not anticipated by Joubert, which discloses solely ketones, esters or  $\beta$ -keto esters and alcohols as the diluent.

Claims 1, 3-6, 8, 12, 14, 18, 19, 24-26, 28 and 29 have been rejected under 35 U.S.C. 102(b) over Jeram '635. Reconsideration of this rejection is also respectfully requested.

As noted at page 5 of the Office Action, Jeram discloses non-reactive fluid diorganopolysiloxanes as diluents. Thus, the presently claimed insulating liquid base phase change material is not disclosed therein, and the reference does not anticipate the present claims. Withdrawal of this rejection is also respectfully requested.

Claims 1-6, 8 and 9 have been rejected under 35 U.S.C. 102(e) or 103 over Hupfield '098. Reconsideration of this rejection is also respectfully requested. Hupfield discloses crosslinked polysiloxanes gels produced from the reaction of hydrocarbon or fluoro hydrocarbons with polysiloxanes. Patentees teach that the materials therein are used in preparing cosmetics, see the first paragraph at column 1 of the patent. Patentees fail to disclose or suggest phase change materials, and moreover fail to disclose or suggest the use thereof and methods for insulating pipelines or flow lines. As a result, the patent fails to anticipate or suggest the presently claimed materials, as well as the method for insulating pipelines or flow lines, e.g., in independent claim 24 and claims dependent thereon. Withdrawal of this rejection is therefore also respectfully requested.

The remainder of the Office Action makes eleven additional rejections, over the above-discussed references, in various cases sometimes combined with additional references. However, none of these additional references, which are arguably cited to provide various features of various dependent claims, remedy the deficiencies discussed above. Specifically, none of the cited references disclose the methods of insulation and/or the particular insulating composition

claimed herein. Accordingly, Applicants will not burden the record with a detailed discussion of each of these rejections, since the basic features of the present claims have not been shown to be taught or suggested in the primary references, and the secondary references are not supplied to remedy these deficiencies, but rather allegedly to reach various preferred features recited in independent claims.

In conclusion, it is submitted that the rejections of record clearly do not withstand scrutiny, and withdrawal thereof is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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Attorney Docket No.: PET-2169

Date: March 4, 2009